



Trans-Lake Washington Project

## Montlake Neighborhoods Evaluation Results

- Concept 1 - Expanded Bridges
  - Neighborhood Connectivity
    - Could improve non-motorized movements across SR 520
    - Not serve as a strong neighborhood connection
    - Allow for additional landscaping and bike/pedestrian trails
    - Montlake transit stop could be upgraded
  - Aesthetics
    - Could be designed to match the character of the neighborhood
    - Utilize noise barriers which would pose minor impacts



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## Montlake Neighborhoods Evaluation Results

- Concept 1 - Expanded Bridges continued
  - Noise
    - Noise walls would likely be proposed for both sides of SR 520
  - Air Quality
    - No impact on the quantity of gaseous air emissions released from vehicle exhaust
  - Cost
    - Estimated at \$25 million



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## Montlake Neighborhoods Evaluation Results

- Concept 2 - Lids in Topographic Areas that Support Lidding
  - Neighborhood Connectivity
    - Reestablish a small part of the visual connection with new open space
    - Physical link over the highway
    - Enhance Montlake Blvd. (i.e., street trees, bike/pedestrian trails, etc.)
    - Upgrade the Montlake transit stop
    - Presence of off-and on-ramps could preclude connections
  - Aesthetics
    - Block unattractive views of SR 520
    - Lids provide a platform for landscaping



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## Montlake Neighborhoods Evaluation Results

- Concept 2 - Lids in Topographic Areas that Support Lidding continued
  - Aesthetics continued
    - Could be designed as a gateway between S. Montlake area and the University
    - Tall walls at the lids' peripheries would block views and contrast with the character of the neighborhood
    - Require a vent structure that would rise well above the lid surface
  - Noise
    - Reduce noise levels near Montlake Blvd. overpass
    - Increase noise levels to the east and west of the lid due to reflected noise
    - Noise mitigation may include noise walls



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## Montlake Neighborhoods Evaluation Results

- Concept 2 - Lids in Topographic Areas that Support Lidding continued
  - Noise continued
    - Noise reducing louvers or fan silencers would be used for mitigating ventilation fan noise
  - Air Quality
    - Similar to Concept 2 in the Eastlake/Portage Bay/Roanoke/North Capitol Hill
  - Cost
    - Estimated at \$110 million



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## Montlake Neighborhoods Evaluation Results

- Concept 3 - Community Suggestions
  - Neighborhood Connectivity
    - Offer more space for the same type of benefits in Concept 2
    - Lid could protrude 20-60 feet higher than the existing grade in some areas
    - Require large ventilation shafts, which could disrupt community connectivity
  - Aesthetics
    - Benefits similar to Concept 2
    - High walls and ventilation shafts would cast shadows, block views, and contrast with the neighborhood



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## Montlake Neighborhoods Evaluation Results

- Concept 3 - Community Suggestions continued
  - Noise
    - Limited number of residual noise impacts
    - Overall noise levels would be reduced
    - Noise mitigation may include noise walls
    - Noise reducing louvers or fan silencers would be used for mitigating ventilation fan noise
  - Air Quality
    - Similar to Concept 3 in the Eastlake/Portage Bay/Roanoke/North Capitol Hill area
  - Cost
    - Estimated at \$340 million



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## Evaluation Criteria

- Neighborhood Connectivity
  - Effectiveness of the community enhancement concepts in strengthening neighborhood connectivity
- Aesthetics
  - Maintain or enhance the visual environment
- Noise
  - Noise reduction benefits, supplemental noise mitigation, & overall noise reduction
- Air Quality
  - Maintain or enhance air quality
- Costs
  - Cost opinions for the community enhancement concepts



# Noise Impact Comparison Summary

	1. Noise Impacts w/o Mitigation	2. Noise Impacts w/mitigation & w/o lids	3. Noise Impacts w/Lids & w/o Supplemental Mitigation	4. Noise Impacts w/Lids & Supplemental Mitigation
Eastlake/Portage Bay/Roanoke/North Capitol Hill Neighborhoods				
Concept 1			○	●
Concept 2			○	●
Concept 3			○	●
Montlake Neighborhoods				
Concept 1			○	●
Concept 2			○	●
Concept 3			○	●
Lake Washington to West of I-405				
Concept 1a			○	●
Concept 1b				
Concept 2a				
Concept 2b				
Concept 3				
East of I-405 to SR 202				
Concept 1			N/A	N/A
Concept 2			N/A	N/A
Concept 3			○	●



# Cost Summary Table

Eastlake/Portage Bay/Roanoke/North Capitol Hill Neighborhoods	
Concept 1 - Expanded Bridges	\$60 million
Concept 2 - Lids In Topographic Areas that Support Lidding	\$360 million
Concept 3 - Community Suggestions	\$500 million
Montlake Neighborhoods	
Concept 1 - Expanded Bridges	\$25 million
Concept 2 - Lids In Topographic Areas that Support Lidding	\$110 million
Concept 3 - Community Suggestions	\$340 million
Lake Washington to West of I-405	
Concept 1 - Expanded Bridges	
Evergreen Point Road Area	\$10 million
84 <sup>th</sup> Avenue NE Area	
Concept 1a	\$15 million and
Concept 1b	\$35 million
92 <sup>nd</sup> Avenue NE Area	
Concept 1a	\$20 million
Concept 1b	\$40 million.
Concept 2 - Lids In Topographic Areas that Support Lidding	
Evergreen Point Road Area	
Concept 2a	\$190 million
Concept 2b	\$350 million
84 <sup>th</sup> Avenue NE Area	
Concept 2a	\$370 million and
Concept 2b	\$510 million
97 <sup>nd</sup> Avenue NE Area	
Concept 2a	\$160 million
Concept 2b	\$320 million
Concept 3 - Community Suggestions	
\$2.2 billion	
East of I-405 to SR 202	
Concept 1 - Expanded Bridges	N/A
Concept 2 - Lids In Topographic Areas that Support Lidding	N/A
Concept 3 - Community Suggestions	
40 <sup>th</sup> Street	\$110 million
31 <sup>st</sup> Street	\$60 million